

**REMARKS/ARGUMENTS**

Reconsideration of the above-identified application, in view of the following remarks, is respectfully requested.

**I     Certified Copy Of Danish Priority Document PA 1999 01279**

In the Office Action Summary, the Examiner has indicated that none of the certified priority documents have been received by the U.S. Patent and Trademark Office. A certified copy of the Danish priority Application No. PA 1999 01279 was filed with the USPTO on June 13, 2001. Applicants enclose herewith a copy of the postcard stamped by the PTO showing receipt of the claim for priority and the '279 priority document.

Applicants respectfully request that the Examiner acknowledge receipt of the '279 priority document in the next Office Action.

**II     Election of Species Requirement**

The Examiner has acknowledged applicant's election of the inhibitor 5-(5-methoxy-1,3-dioxo-1,3-dihydro-isoindol-2-ylmethyl)-2-oxalyl-amino -4,7-dihydro-5H-thieno-[2,3-c]pyran-3 carboxylic acid. The Examiner has withdrawn claims 14, 15, 19, 24, and 25 from prosecution pursuant to 27 C.F.R. § 1.142(b) as covering non-elected species.

Applicants respectfully request that the Examiner withdraw the election of species requirement upon allowance of a generic claim.

**III    Amendments to the Specification**

The specification has been amended to claim priority to U.S. Serial No. 09/628,490, and all of the applications to which it claims priority. Since this application was filed before November 29, 2000, the time period in rule 78(a)(2)(ii) does not apply to this application. See 37 C.F.R. § 1.78(a)(2)(ii)(B). Since certified copies of the Danish Patent Application Nos. 0344/98, PA 1998

00480, PA 1998 00938, PA 1998 01385, and PA 1998 01612, were submitted in U.S. Serial No. 09/268,490, applicants respectfully submit that certified copies of these applications do not need to be submitted in this application.

#### **IV     Status Of The Claims**

Claims 1-10 and 28 have been amended.

Claims 1 and 2 have been amended to incorporate the corrections requested by the Examiner on page 7 of this Office Action. Claim 28 has been amended to recite the compound of Formula I. Claims 1-10 have been amended to recite "at least one PTPase in which said inhibition is intended", as suggested by the Examiner in a telephone call to Applicant's representative, John C. Todaro, on April 16, 2003. Claims 1-6 have been amended to correct typographical errors. Support for these amendments may be found in the specification at page 34, lines 25-30, page 35, lines 4-7 and 31-34, page 63, line 1 to page 65, line 13. No new matter has been added by these amendments.

Claims 14, 15, 19, 24, and 25 have been withdrawn by the Examiner. Claims 1-13, 16-18, 20-23, and 26-31 are currently at issue.

#### **V     Rejections under 35 U.S.C. § 112**

(i) Claims 1-13, 16-18, 20-23, and 26-31 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of enablement. The Examiner acknowledges that the claims are enabled for the inhibition of PTPases by inhibitors having a carboxyl substituted thienyl core and an oxalo side group, but asserts that the specification "does not reasonably provide enablement for the use of inhibitors as broadly recited by purely functional characteristics." The Examiner also asserts that the specification does not enable use of the inhibitors for autoimmune diseases or cancers.

At pages 2-6 of the Office Action, the Examiner sets forth the *In re Wands* factors, and concludes that the specification would not enable one skilled in the art to practice the invention without undue experimentation. The Examiner states at page 5 of the Office Action that the



of the specification must not be ignored because claims are to be given their broadest reasonable interpretation that is consistent with the specification.

See also *Application of Angstadt* (537 F.2d 498, 502-503, 190 USPQ 214, 218 [Cust. & Pat.App., 1976]) stating that applicants “are not required to disclose every species encompassed by their claims even in an unpredictable art.” Similarly, in *In re Rasmussen*, court stated that “a claim may be broader than the specific embodiment disclosed in a specification” (650 F.2d 1212, 1215, 211 USPQ 323, 326 [Cust. & Pat.App., 1981]). Finally, in *In re Goffe* (542 F.2d 564, 567, 191 USPQ 429, 431 [CCPA 1976]), the court stated:

To provide effective incentives, claims must adequately protect inventors. To demand that the first to disclose shall limit his claims to what he has found will work or to materials which meet the guidelines specified for "preferred" materials in a process such as the one herein involved would not serve the constitutional purpose of promoting progress in the useful arts.

Examples 121 and 122 on pages 299-306 of the specification provide a method for identifying substrates that are specifically dephosphorylated by PTPases that are inhibited by the compounds disclosed in the specification. Once such substrates have been identified using the method disclosed in Example 121, one of ordinary skill in the art would readily recognize those conditions, such as autoimmune diseases, acute and chronic inflammation, osteoporosis, cancers, type I diabetes, type II diabetes, and obesity, in which the substrates thus identified are involved. Indeed, the present specification discloses numerous references that teach various conditions that are associated with PTPases (see “Summary Of Background Section” on pages 15-16 of the present specification).

Example 123 on pages 306-307 of the specification clearly describes a method for analyzing the blood glucose lowering effects of all the compounds of the invention, not just those having a carboxyl-substituted thienyl core and an oxalo side group, as asserted by the Examiner. This is a key assay that provides a way of assaying substrates at the functional level.



Applicants have amended this application to claim the benefit of the application which matured into U.S. Patent No. 6,262,044 (i.e., U.S. Serial No. 09/268,490). Therefore, U.S. Patent No. 6,262,044 is not a reference under 35 U.S.C. § 102(e) to this application.

Accordingly, applicants respectfully request that the rejection be withdrawn.

## **VII Obviousness-Type Double Patenting Rejection**

Claims 1-13, 16-18, 20-23 and 26-31 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims 9 and 10 of the '044 Patent. The Examiner concedes that the conflicting claims are not identical, but asserts that they are not patentably distinct from each other because the prior art claims various inhibitors within the scope of the present claims. The Examiner cites a comparison of claims 1 and 7 of the '044 Patent with claims 26 and 27 of the present application, and concludes that it would have been obvious that the various functional characteristics recited in the present claims would be inherent to the conflicting inhibitors, motivated by the recognition that the same compounds are being used for the same end purpose (PTPase inhibition).

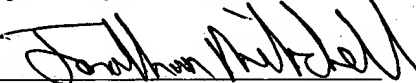
This rejection is respectfully traversed, on the grounds that the claims of the '044 Patent are directed to compounds wherein group A in the compound of Formula (I) is a 4,5,6,7-tetrahydro-thieno derivative. Accordingly, the claims of the '044 Patent do not encompass compounds with a 4,7-dihydro-5*H*-thieno[2,3-*c*]pyran-3-carboxylic acid core, as is present in the elected species, and as a result there is no overlap with the elected species, namely 5-(5-methoxy-1,3-dioxo-1,3-dihydro-isoindol-2-ylmethyl)-2-oxalyl-amino-4,7-dihydro-5*H*-thieno-[2,3-*c*]pyran-3 carboxylic acid.

Since Group A of claim 1 of the '044 Patent does not cover the 4,7-dihydro group, applicants believe that the Examiner's rejection of claims 1-13, 16-18, 20-23 and 26-31 on obviousness-type double patenting grounds over the '044 Patent is in error, and respectfully request that this rejection be withdrawn.

In view of the foregoing remarks, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

By 

Jonathan P. Mitchell, Ph.D.

Registration No.: 50,239

DARBY & DARBY P.C.

P.O. Box 5257

New York, New York 10150-5257

(212) 527-7700

(212) 753-6237 (Fax)

Attorneys/Agents For Applicant